Wallops Island Fire Station

Responses to Industry Questions Received After Posting Invitation for Bid (IFB)
NNG15533004R

61. [Specification] Section 07 27 00.45 10 Building Air Barrier System

3.3 Building Air Tightness Test requires the air leakage rate of the building envelope shall not exceed 04.40 cfm/ft2 at a pressure differential of 0.3 inches water gauge.

Typically the maximum allowable air leakage rate is 0.25 or 0.40 cfm/ft2. Is the 04.40 a typographical error? What is the correct rate?

NASA RESPONSE: Building Air Tightness Shall be 0.40 cfm[ft2]. Correct in accordance with C402.4.1.2.3 of 2012 IECC. Amendment 3 was issued 4/16/15 to correct the air leakage rate from not exceeding .04.40 cfm/ft2 to not exceeding .40 cfm/ft2.

62. [Specification] Section 07 27 00.45 10 Building Air Barrier System 3.3.1(a) requires 12 positive and negative test pressures ranging between 3.75 and 11.25 psi.

These pressures 25,855 and 77,566 Pascals respectively (103 to 312 in. wc). Typically tests are conducted at pressures between 25 and 75 Pascals (0.1 to 0.3 in. wc). Are the pressures indicated in 3.3.1(a) correct?

NASA RESPONSE: No, use equivalent pressures at the required maximum air leakage rate. Amendment 3 was issued 4/16/15 to correct the pressures indicated to "use equivalent pressures at the maximum air leakage rate."

63. [Specification] Section 07 27 00.45 10 Building Air Barrier System

3.3.1(d) does require the air leakage rate at 0.3 in wg (75 Pascals) to not exceed 0.25 cfm/sq. ft2. Can we assume the 04.40 rate discussed in 3.3 an error? What is the correct rate?

NASA RESPONSE: The correct rate is 0.40 cfm/ft2 at 75 Pascals (0.3 wg). Amendment 3 was issued 4/16/15 to correct the .04.40 cfm/ft2 rate to 0.40.

64. [Specification] Section 07 27 00.45 10 Building Air Barrier System

3.3.1(g) requires the Equivalent Leakage Are (EqLa) to be expressed at 11.25 psi. The EqLa is typically expressed at a pressure of 10 Pascals (0.04 in. wc). Can we assume the 11.25 psi value is an error? What is the correct psi value?

NASA RESPONSE: Use the equivalent psi value for 10 Pascals. Amendment 3 was issued 4/16/15 to correct the 11.25 psi to use an equivalent psi value for 10 Pascals.

65. Metal Roofing: Drawing A-901

The plans call for a 30# felt under the panels, high temperature ice and water shield is required for the water tightness warranty. Can this be clarified? A-901

NASA RESPONSE: Furnish membrane barrier as specified in Section 07 13 53.

66. The construction of the metal roof on the main building shows the panel being attached directly into the insulation. If a composite insulation (nailbase) is not desired, the fasteners will have to penetrate the insulation into the conditioned space of the building to achieve the required uplift. This will compromise the vapor barrier. Is it the intent of the architect to use a composite insulation board (nailbase) with a plywood face? If so, what thickness of plywood is required? A-901

NASA RESPONSE: No. Plywood is not permitted in Type 2 non-combustible construction.

67. The plans show for a perforated ridge clip at the metal roof. This would be consistent with a vented nailbase (composite insulation board). Does the architect want a vented nail base? A-901 detail #10

NASA RESPONSE: No, we do not want a vented nail base.

68. RESERVED

69. The plans call for 4" of insulation which is an R value of 22.8 and the plans call for a minimum R value of 30 which is approximately 5.5" of insulation. Code requires an R value of 25, which is 4.5" of insulation. What thickness of insulation is required? A-901 Detail #10

NASA RESPONSE: R30 is the minimum. Amendment 3 was issued 4/16/15 to revise A-901 Detail #10, from 4" of insulation with R value of 30 minimum to minimum thickness of insulation for a minimum R value of 30.

Flat Roofing:

70. RESERVED

71. The specifications call for a cold adhered modified bitumen roof, the specified warranty is not available as the job is specified. A torch applied, or hot asphalt applied modified bitumen roof would be required, or a single ply membrane applied in bonding adhesive. What is the architect's intent?

NASA RESPONSE: Specification 07 52 00. Meet the specified warranty utilizing the appropriate application method for modified bitumen system meeting or exceeding the performance requirements specified.

72. The detail at the parapet wall is not acceptable for a 120 mph warranty. The Top edge will have to be secured with termination bar and have a piece of counter flashing fabricated from the manufacturer's metal installed over it. The manufacturer's metal is not available in stainless steel. Is this acceptable, and will a 040 aluminum be acceptable? A-901

NASA RESPONSE: Furnish the suitable assembly to meet the wind warranty requirement. .040 aluminum is acceptable providing it meets all applicable warranty and performance requirements.

73. What is the minimum R value for the flat roof? A-901

NASA RESPONSE: R30 is the minimum R value for the flat roof.

74. Please refer to drawing A-501 and A-104. Detail 1 on A-501 refers to "No Smoking" vinyl. I cannot find any indication as to how many there will be or where they will be installed. Please advise.

NASA RESPONSE: Unless otherwise indicated on the drawings or as governed by the requirements of the LEED checklist on Sheet A-001 of the drawings (specifically, IEQp2), assume one of these sign types to be located at each of Doors 100A and 115A.

75. Notes 1 and 2 above detail 1 refer to "Area of Refuge" signage. I found two of these signs indicated on A-104 but I cannot find any indication of what these signs should look like, what they are manufactured form, or how they are installed. Please advise.

NASA RESPONSE: As dictated by notes 1 and 2 referenced in the above question, the code governs the look and material of the signs in question; in this case, the IBC 2012.

76. RESERVED

77. Drawing E102 Note 5 Specification Section 26000. Please clarify if each fan is to be run through the controller or each circuit?

NASA RESPONSE: Each EERS-# (1-8) will get tapped from its respective circuit ahead of the vehicle exhaust control panel and get wired thru the vehicle exhaust control panel which contains 8 individual contactors that the circuits will get passed thru. From the control panel each tapped portion of the circuit will go to the appropriate fan. The electrical contractor is responsible for the power wiring from Panel M2 to the control panel and from the control panel to each EERS and the power wiring for the 120V circuit to power the control panel. The control panel, photoelectric eyes, magnetic door switches, wall push buttons, and any other peripheral input/output devices of the vehicle exhaust system are furnished and installed by the mechanical contractor and that includes any control wiring between said items.

Fans EF-3 and EF-4 do not need the starter specified.

78. Drawing E102 Note 10 Specification Section 26000. Please clarify if the EF-3 and EF-4 which are single phase 120v will require the motor controller as described in Note 10.

NASA RESPONSE: Motor controllers are required for EF-1 and EF-2. They are not required for EF-3 and EF-4.